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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,374	07/14/2004	Dolf Henricus Jozef Van Casteren	NL020022	2783
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PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER HO, BINH VAN	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/501,374

Applicant(s)

VAN CASTEREN, DOLF  
HENRICUS JOZEF

Examiner

Binh V. Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 12-18 is/are rejected.
- 7) ☒ Claim(s) 9, 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 8; it is unclear what a word "its" refers to. Does this word refer to control means or switch element.

The similar deficiencies are found in line 12 and line 13, which requires the same clarification / correction.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8,12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Quazi (4,933,605).

## (Claim 1)

Quazi discloses in figure 10, a device for operating a high-pressure discharge lamp, comprising a switched-mode power supply circuit for supplying power to the high-pressure discharge lamp from a supply voltage, the power supply circuit comprising at least one power switching element (Q1, Q2); control (C1) means for controlling the at least one power switching element (Q1, Q2) in its switched-on and switched-off states for controlling the power or current supplied to the high-pressure discharge lamp (T1, T2); wherein the control (C1) means are adapted to control the power consumed by the lamp (T1, T2) during its steady phase or the current consumed by the lamp during its run-up phase by controlling the on-time (Ton) (col. 3, lines 19 +) of the switched-on state of the at least one power switching element (Q1, Q2).

## (Claims 2-3,16-17)

Quazi discloses the value of the on-time (Ton) of the at least one power switching element (Q1, Q2) being a preset value, the preset value depending (col. 3, lines 19 +) on the specifications of the type of discharge lamp used.

## (Claims 4-5,18)

Quazi discloses in figure 10, input current determining means for determining the input current of the power supply, the input current determining means providing a signal representative of the determined input current / voltage determining means for determining the lamp voltage, the voltage determining means providing a signal representative of the determined lamp voltage a feedback means through which said signal is fed back to the control (C1) means, wherein the control means are adapted to

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control the on-time (Ton) of the at least one switching element (Q1, Q2) as a function of said feedback signal.

(Claim 6)

Quazi discloses in figure 10, a dim level means for setting a reduced lamp power level, the dim level means providing a signal representative of the dim level of the lamp, wherein the control (C1) means are adapted to control the on-time (Ton) of the at least one power switching element (Q1, Q2) as a function of said signal.

(Claim 7)

Quazi discloses the control (C1) means comprise a feedback (Figure 10) controller for controlling the control means.

(Claim 8)

Quazi discloses the control means being adapted to provide fast lamp power adjustments (col. 4, lines 31 +) and the feedback controller (C1) is adapted to provide relatively slow lamp power adjustments.

(Claim 12)

Quazi discloses in figure 7, making of a half or full-bridge power supply and a filter circuit comprising a series inductor (L) (LR1, LR2) and at least one filter capacitor (C) (CR1, CR2) parallel to the lamp.

(Claim 13)

Quazi discloses the switched-mode power supply comprising a half-bridge (figure 6) or full-bridge (figure 7) commutating forward topology.

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(Claim 14)

Quazi discloses in figure 10, the switched-mode power supply comprises a down-converter.

(Claim 15)

Quazi discloses a method of operating a high-pressure discharge lamp, comprising supplying power to the high-pressure discharge lamp from a supply voltage, using at least one power switching element (Q1, Q2), controlling the power consumed by the lamp (T1, T2) during its steady phase using control means; wherein said control (C1) means control the lamp power during the steady state of the lamp by fixing the on-time (Ton) (col.4, lines 24 +) of the at least one power switching element (Q1, Q2).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quazi (4,933,605) in view of Williamson (6,343,021).

Quazi teaches substantially all of the elements, except the switching frequency of the switched-mode power supply is at least 100Khz. Williamson teaches the high frequency ( tens of Kilohertz). It would have been obvious to one of ordinary skill in the art at the time of the invention to operate Quazi's switching frequency of the

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switched-mode power supply at least 100Khz as taught by Williamson (col. 2, lines 51 +) in order to overcome the weight, size, and the efficiency limitations of low frequency power supply.

***Allowable Subject Matter***

5. Claims 9, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The cited art of record fails to teach the on-time (Ton) is iteratively adapted with a iteration frequency lower than the switching frequency of the switched-mode power supply and the iteration frequency is 100 Hz or less, preferably about 10 Hz or less.

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### Inquiry

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner



Binh V Ho  
Examiner  
Art Unit 2821

Binh Van Ho  
10/18/2005